

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 33

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte RONALD QUAN  
and  
JOHN F. PERUZZI

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Appeal No. 2000-2248  
Application No. 08/405,482

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ON BRIEF

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Before THOMAS, JERRY SMITH, and RUGGIERO, Administrative  
Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 1-38, all of the claims pending in the present application, which is an application for reissue of U.S. Patent No. 5,194,965.

The claimed invention relates to a method and apparatus for disabling copy protection signals included in prerecorded video cassette tapes to inhibit unauthorized copying. The

copy protection signals, based on the differing characteristics of television and video cassette recorder (VCR) circuitry, include pseudo-synch pulses and/or added automatic gain control (AGC) pulses in the blanking interval of a video signal. Authorized copying of a video signal containing such copy protection signals is enabled by altering the level of the video signal by level shifting at least the parts of the signal containing such copy protection signals, thereby rendering the signals ineffective in preventing such copying.

Claim 18 is illustrative of the invention and reads as follows:

18. A method for reducing effects of copy-protect signals in blanking intervals of a video signal, said copy-protect signals including pulses added to said blanking intervals, said method comprising the steps of:

receiving a video signal having said pulses added thereto;

detecting a blanking interval of said video signal;  
and

shifting a voltage level of at least a part of said blanking interval in which said added pulses are present, thereby enabling copying of said video signal.

The Examiner's Answer cites the following prior art:

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Ryan 1987	4,695,901	Sep. 22,
Karlock 1989	4,870,297	Sep. 26,
Harney et al. (Harney) 1992	5,113,440	May 12,

(Effectively filed Jul. 21,  
1989)

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Claims 1-38 stand finally rejected under 35 U.S.C. § 251 as being based upon a defective supplemental reissue declaration. Claims 11, 12, 18-23, and 38 stand finally rejected under 35 U.S.C. § 102(b) as being anticipated by Ryan. In a separate rejection, claims 11, 12, 18-27, and 38 stand finally rejected under 35 U.S.C. § 103 as being unpatentable over Karlock in view of Ryan.<sup>1</sup>

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Briefs<sup>2</sup> and Answer for the respective details.

#### OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the Examiner, the arguments in support of the rejections and the evidence of anticipation

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<sup>1</sup> As indicated in the communication dated August 1, 2000 (paper no. 32), the Examiner has withdrawn the 35 U.S.C. § 103 rejection of claims 1-3, 7, 15, and 16 based on the combination of Ryan and Harney and the 35 U.S.C. § 103 rejection of claims 1-3, 7, 8, 15, and 16 based on the combination of Ryan, Karlock, and Harney.

<sup>2</sup> The Appeal Brief was filed January 3, 2000. In response to the Examiner's Answer dated March 15, 2000, a Reply Brief was filed May 16, 2000, which was acknowledged and entered by the Examiner as indicated in the communication dated August 1, 2000.

and obviousness relied upon by the Examiner as support for the prior art rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Briefs along with the Examiner's rationale in support of the rejections and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that the disclosure of Ryan fully meets the invention as set forth in claims 11, 12, 18-23, and 38. We are also of the view that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the obviousness of the invention as recited in claims 11, 12, 18-23, and 38. We reach the opposite conclusion, however, with respect to the obviousness of the invention set forth in claims 24-27.

At the outset, we briefly note that Appellants have not contested the merits of the Examiner's rejection of claims 1-38 based on a defective supplemental reissue declaration. Rather, Appellants have declared the intention (Brief, page 3) to submit a cumulative supplemental declaration after an indication that the application is in condition for allowance

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in accordance with

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section 1444 of the MPEP. Therefore, the Examiner's rejection of claims 1-38 under 35 U.S.C. § 251 as having a defective supplemental reissue declaration is sustained.

We next consider the Examiner's 35 U.S.C. § 102(b) rejection of claims 11, 12, 18-23, and 38 as anticipated by Ryan. Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore & Assocs., v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

With respect to independent claims 11, 18, 21, and 38, the Examiner has indicated (Answer, pages 4 and 5) how the various limitations are read on the disclosure of Ryan. In particular, the Examiner points to the circuitry and waveform diagrams illustrated in Figures 1 and 2 and accompanying description in Ryan. In the Examiner's analysis (Answer,

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pages 10 and 11),



Ryan's removal of the AGC and pseudo-sync copy-protect signals results in a level shift from a DC level to zero volts, thereby anticipating Appellants' claimed "level-shifting" feature.

In response, Appellants' arguments center on the Examiner's alleged misinterpretation of the terminology "level-shifting." In Appellants' view (Brief, page 5, Reply Brief, pages 2 and 5), the Examiner has interpreted the phrase "level-shifting" in a manner which is not consistent with its plain meaning as used by Appellants in the specification. This plain meaning of "level-shifting" is asserted to be "altering voltage level" (Brief, page 5, line 5).

After careful review of the Ryan reference in light of the arguments of record, we are in agreement with the Examiner's position as stated in the Answer. In our view, the Examiner's line of reasoning in which Ryan's removal of the copy-protect portions of a video signal resulting in a voltage shift to zero volts is interpreted as "level-shifting" is not inconsistent with Appellants' own assertion of the plain meaning of "level-shifting" as "altering voltage level." We further point to Ryan's disclosure (col. 7, line 66 to col. 8,

line 2) of a further embodiment of his disclosed invention in which, instead of removal of the added copy-protect AGC pulses, the amplitude of the pulses are reduced. In our opinion, such a described operation lends further credence to the Examiner's position that Ryan performs "level-shifting" within the "altering voltage level" meaning asserted by Appellants.

In a further amplification of their arguments concerning the correct interpretation of "level-shifting," Appellants assert (Brief, page 6) that "level shifting of AGC pulses means shifting a DC level of the signal, so that the AGC pulses are moved (up or down) in their entirety."<sup>3</sup> We agree with the Examiner, however, that such an argument is not commensurate with the scope of the claims. It is axiomatic that, in proceedings before the PTO, claims in an application are to be given their broadest reasonable interpretation consistent with the specification, and that claim language

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<sup>3</sup> While independent claim 11 recites " . . . level-shifting means for effecting transmission of an output video signal at least a portion of which having its D.C. level shifted," the level shifting feature recited in independent claims 18, 21, and 38 is silent as to any mention of a DC level.

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should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983).

Moreover, limitations are not to be read into the claims from the specification. In re Van Geuns, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993), citing In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). We find nothing in the language of the present claims which requires the entirety of any added copy-protect signals to be level-shifted. In our view, the only claimed level-shifting requirement is that a portion of a video signal having added copy-protect signals be level shifted, a feature we find clearly taught by Ryan.

We are cognizant of the fact that during prosecution of this application, Appellants have relied on a Rule 132 declaration filed August 24, 1998 to buttress their arguments concerning the correct interpretation of the language "level-shifting." This declaration provides a definition of "level-shifting" as "altering at least the level of the base of the AGC pulses." Our review of this declaration, however, finds no convincing evidence which would persuade us as to the

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correctness of Appellants' position. The language used in declarant's asserted definition "base of the AGC pulses" appears nowhere in any of the appealed claims, nor for that matter, anywhere in Appellants' specification. As such, the statements in such declaration have little probative value on the issue of the proper interpretation of the language of the claims on appeal.

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For the above reasons, since all of the claimed limitations are disclosed by Ryan, the Examiner's 35 U.S.C. § 102(b) rejection of claims 11, 18, 21, and 38 is sustained.

Turning to a consideration of dependent claim 12 which sets forth the attenuation of copy-protect signals without eliminating them, we sustain the 35 U.S.C. § 102(b) rejection of this claim as well. We agree with the Examiner that the disclosure of Ryan at column 7, line 60 to column 8, line 2 in which the elimination of a certain percentage of pulses along with the reduction in amplitude without elimination of other pulses meets the claimed requirement.

The separate patentability of the limitations of dependent claims 19, 20, 22, and 23 have not been separately argued by Appellants, and, accordingly, these claims will be treated as falling with their parent claims. See In re Young, 927 F.2d 588, 590, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991); In re Nielson, 816 F.2d 1567, 1572, 2 USPQ2d 1525, 1528 (Fed. Cir. 1987); and In re Wood, 582 F.2d 638, 642, 199 USPQ 137, 140 (CCPA 1978). Thus, it follows that the examiner's rejection of claims 19, 20, 22, and 23 under 35 U.S.C. § 102(b) is also sustained.

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We next turn to a consideration of the Examiner's 35 U.S.C. § 103 rejection of claims 11, 12, 18-27, and 38 as being unpatentable over Karlock in view of Ryan. As a general proposition in an appeal involving a rejection under 35 U.S.C. § 103, an Examiner is under a burden to make out a prima facie case of obviousness. If that burden is met, the burden of going forward then shifts to Appellants to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976).

With respect to independent claims 11, 18, 21, and 38, the Examiner, as the basis for the obviousness rejection, proposes to combine the level shifting teachings of Karlock with the copy-protect features of Ryan. In the Examiner's line of reasoning (Answer, page 8), the skilled artisan would have been motivated and found it obvious to apply the level

shifting teachings of Karlock, designed to remove unwanted information from a video signal, to Ryan in order to modify the added copy protect AGC and pseudo-sync pulses of Ryan and thereby enable the making of authorized recordings.

In our opinion, the Examiner's analysis is sufficiently reasonable that we find that the Examiner has at least satisfied the burden of presenting a prima facie case of obviousness. The burden is, therefore, upon Appellants to come forward with evidence or arguments which persuasively rebut the Examiner's prima facie case of obviousness. Arguments which Appellants could have made but elected not to make in the Briefs have not been considered in this decision (note 37 CFR § 1.192).

Appellants' arguments in response, aside from a generalized statement concerning the combinability of Karlock and Ryan (Brief, page 11), focus on their contention that Karlock, as with Ryan, does not disclose Appellants' "level-shifting" as claimed. Appellants contend (Brief, page 10, Reply Brief, pages 5-6) that in Karlock, the unwanted video information signal is suppressed by replacing it with a zero voltage signal and, therefore, in this respect, Karlock's



teachings are cumulative to that of Ryan.

After reviewing the Karlock and Ryan references in light of Appellants' arguments, we agree with the Examiner's position as stated in the Answer. We do agree with Appellants that, since the bulk of Karlock's disclosure is directed to the replacing of any unwanted video signals with a zero voltage signal, such teaching is cumulative to Ryan which also removes unwanted signals by blanking such signals and effectively reducing the the voltage level to zero. We have determined, however, for reasons discussed supra with respect to Ryan, that such suppression by reduction to a zero voltage level provides a clear teaching of Appellants' claimed level shifting.

We further note that, while Karlock's disclosure is primarily concerned with unwanted signal alteration by removal or suppression, the portion of the disclosure at column 5 lines 20-40 of Karlock describes various circuit arrangements for altering the original undesired video signal information without completely suppressing or replacing the information. As described with reference to Figure 10, the circuit

arrangement including FET 27 can be constructed in various ways so as to alter unwanted information signals without completely suppressing them. One example of this alteration is discussed at column 5, lines 37-40, and illustrated in Figure 10f of Karlock in which a resistor 57 is connected into the FET circuit having the resultant effect of offsetting unwanted portions of a video signal in a positive direction as illustrated in Figure 11. In our opinion, even it is assumed, arguendo, that the removal or suppression of signals as described in Karlock and Ryan is not construed as "level-shifting," this positive offset embodiment of Karlock provides a clear and unambiguous disclosure of such level-shifting feature within the "plain meaning" of the language as asserted by Appellants.

After considering the totality of evidence, we are convinced that the skilled artisan would have found it obvious to apply the level-shifting techniques of Karlock to implement the copy-protect inhibiting features of Ryan for the rationale expressed by the Examiner. Since the Examiner's prima facie case of obviousness has not been overcome by any convincing arguments from Appellants, the Examiner's 35 U.S.C. § 103

rejection of independent claims 11, 18, 21, and 38 is sustained. Dependent claims 12, 19, 20, 22, and 23 have not been argued separately in the Briefs with respect to the obviousness rejection based on Karlock and Ryan and, accordingly, these claims fall with their base claims. Therefore, the 35 U.S.C. § 103 rejection of claims 12, 19, 20, 22, and 23 is also sustained.

We next turn to a consideration of the Examiner's obviousness rejection of claims 24-27 and note that, while we found Appellants' arguments to be unpersuasive with respect to the rejection of claims 11, 12, 18-23, and 38 discussed supra, we reach the opposite conclusion with respect to claims 24-27. As with the other claims on appeal, independent claim 24 is directed to a level shifting feature but also includes a further limitation as to the nature of the negative-going pulses in the vertical blanking interval of the video signal, i.e., these negative-going pulses are specifically recited as being horizontal sync pulses. In attempting to address this claim language, the Examiner asserts (Answer, page 8) that the selection of the length of the timing interval in the Figure 2 circuitry of Karlock to ensure that any negative-going pulses

in the vertical blanking interval are horizontal sync pulses would be a matter of obvious design choice. We find this assertion by the Examiner to be totally devoid of any support on the record. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992). Although Karlock perhaps suggests a possible variation of timing signal interval, we can find no basis on the record for the Examiner's conclusion that the skilled artisan would have found it obvious to adjust such interval to produce only horizontal sync negative-going pulses in the blanking interval of a video signal. It is our opinion that this modification of the prior art could only come from an improper hindsight reconstruction of the invention by the Examiner. In view of the above discussion we cannot sustain the Examiner's obviousness rejection of independent claim 24, nor of claims 25-27 dependent thereon.

In conclusion, we have sustained the Examiner's 35 U.S.C. § 102(b) rejection of claims 11, 12, 18-23, and 38. We have

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also sustained the Examiner's 35 U.S.C. § 103 rejection of claims 11, 12, 18-23, and 38, but have not sustained the 35 U.S.C. § 103 rejection of claims 24-27. Lastly, we have sustained the Examiner's rejection of claims 1-38, all of the appealed claims, under 35 U.S.C. § 251. Accordingly, the Examiner's decision rejecting claims 1-38 is affirmed.

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No time period for taking any subsequent action in  
connection with this appeal may be extended under 37 CFR §  
1.136(a).

AFFIRMED

JAMES D. THOMAS  
Administrative Patent Judge

JERRY SMITH  
Administrative Patent Judge

JOSEPH F. RUGGIERO  
Administrative Patent Judge

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